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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/826,894	04/16/2004	Kenneth J. Cotton	620SC [2630.3176.001]	1424
7590 06/22/2005			EXAMINER	
William H. Francis			DINH, PHUONG K	
Reising, Ethington, Barnes, Kisselle, P.C. P.O. Box 4390			ART UNIT	PAPER NUMBER
Troy, MI 48099-4390			2839	
			DATE MAILED: 06/22/2005	5

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	10/826,894	COTTON ET AL.			
Office Action Summary	Examiner	Art Unit			
	Phuong KT Dinh	2839			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period we Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	6(a). In no event, however, may a reply be tim within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	ely filed will be considered timely. the mailing date of this communication. 0 (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on <u>14 April 2005</u> .					
2a)⊠ This action is <b>FINAL</b> . 2b)☐ This	)⊠ This action is FINAL. 2b) This action is non-final.				
-3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims		·			
4) ☐ Claim(s) 1-35 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) 22-29 is/are allowed. 6) ☐ Claim(s) 1-7,9-11,15,16 and 19-21 is/are reject 7) ☐ Claim(s) 8,12-14,17 and 18 is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	ed.				
Application Papers					
9) The specification is objected to by the Examiner 10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction of the original of the correction of the original of the correction of the original original original or the correction of the original origi	epted or b) objected to by the Edrawing(s) be held in abeyance. See on is required if the drawing(s) is obj	37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents</li> <li>2. Certified copies of the priority documents</li> <li>3. Copies of the certified copies of the priority application from the International Bureau</li> <li>* See the attached detailed Office action for a list of</li> </ul>	have been received. have been received in Application ity documents have been receive (PCT Rule 17.2(a)).	on No d in this National Stage			
Attachment(s)		,			
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date</li> </ol>	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:				

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#### **DETAILED ACTION**

## Claim Objections

- 1. Claim 11 is objected to because of the following informalities:
- 2. Claim 11, term "the other end of the ends is solid" is contradict of claim 1, since hole in only one end.
- 3. Appropriate correction is required.

## Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 1-5, 9, 15-16, 19-21, 30-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zeigler, Jr. (U. S. Patent 3,678,447) in view of Brishka (U. S. Patent 3,398,391).
- Regarding claims 1, 9, 15-16, 19-21, 30-35, Zeigler, see figures 1-3, discloses a pass though electrical connector assembly comprising: a body 80 of an electrically insulative and somewhat sidewall plastic or rubber material, column 2, lines 40-45, at least one through hole formed in the body and an electrical conductive pin 34 forced into the through hole and retained in the body and the pin 34 having first and second ends each having a recess therein structured to receive and have attached thereto a

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structurally over receptacles at 32, 36.

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separate electrically conductive wire 58 and a pin 90, an intermediate solid portion 54 between the recess constructed to separate wires and provide a fluid-tight seal between the wires and the pin a tip 36 adjacent and the first end of the pin 34 a barb 38; a head 36 formed adjacent the second end of the pin, the lead having shoulder constructed to engage the body when the pin is forced into the through hole and a circumferentially continuous exterior between the ends press fit into the through hole of the body with an interference fit with the body and forming a fluid-tight seal between the pin and the body. Zeigler, Jr. discloses the claimed invention except for clear disclosure of line 17 interference fit. Brishka discloses contact interference fit into a yieldable body. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Zeigler to provide the interference fit as taught by Brishka so as to provide better sealing. Reference to permanent attachments and to wires does not define

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- 7. Regarding claim 2, Zeigler, Jr. discloses the body is a housing constructed of plastic.
- 8. Regarding claim 3, Zeigler, Jr. discloses the body is a housing constructed of synthetic rubber.
- 9. Regarding claim 4, Zeigler, Jr. discloses the body is made of low permeation material.
- 1. Regarding claims 5, 7, Zeigler, Jr. discloses the claimed invention except for discloses a flange having a hole complementary to the body and the body is received in the hole in the flange and sealed to the flange. Brishka discloses a flange 80 and seal to

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the flange at. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Zeigler, Jr. to provide the flange and seal to the flange so as to hold and seal connector to a panel.

- 10. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zeigler, Jr. (U. S. Patent 3,678,447) in view of Brishka (U. S. Patent 3,398,391) and further in view of Tunn (U. S. Patent 6,679,726).
- 11. Regarding claim 6, Zeigler, Jr. and Brishka disclose the body comprises a snap latch to retain the body in the flange. Tunn discloses the body comprises a snap latch to retain the body in the flange at 22, see figure 1. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Zeigler and Brishka to provide the snap latch to retain the body in the flange as taught by Tunn so as to provide support for the connector.
- 12. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zeigler, Jr. (U. S. Patent 3,678,447) in view of Brishka (U. S. Patent 3,398,391) and further in view of Scott (U. S. Patent 2,152,504).
- 13. Regarding claim 10, Zeigler, Jr. and Brishka disclose the claimed invention except for the pin has a separate blind hole with a circumferentially continuous sidewall opening into each of the ends of the pin and constructed to receive a separate wire in each blind hole permanently attached therein. Scott, see figure 1 at 15, 16, discloses the pin and constructed to receive a separate wire in each blind hole permanently attached therein. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Zeigler and Brishka to provide the pin and

constructed to receive a separate wire in each blind hole permanently attached therein so as to secure the wires.

## Allowable Subject Matter

- 14. Claims 8,12-14, 17-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 15. Claims 22-29 are allowed.
- 16. The following is an examiner's statement of reasons for allowance:
- 17. None of the reference discloses the body has at least two through holes each formed in the body.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Response to Arguments

18. Applicant's arguments with respect to claims 1-7, 9-11, 15-16, 19-21, 30-35 have been considered but are most in view of the new ground(s) of rejection.

### Conclusion

19. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong KT Dinh whose telephone number is 571-272-2090. The examiner can normally be reached on 8 -5, 5 days a week.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TC Patel can be reached on 571-272-2098. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phuong Dinh June 14, 2005. Phuong KT Dinh Primary Examiner Art Unit 2839